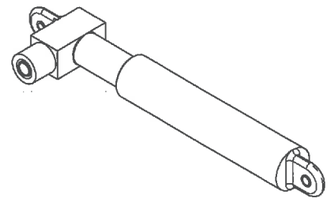
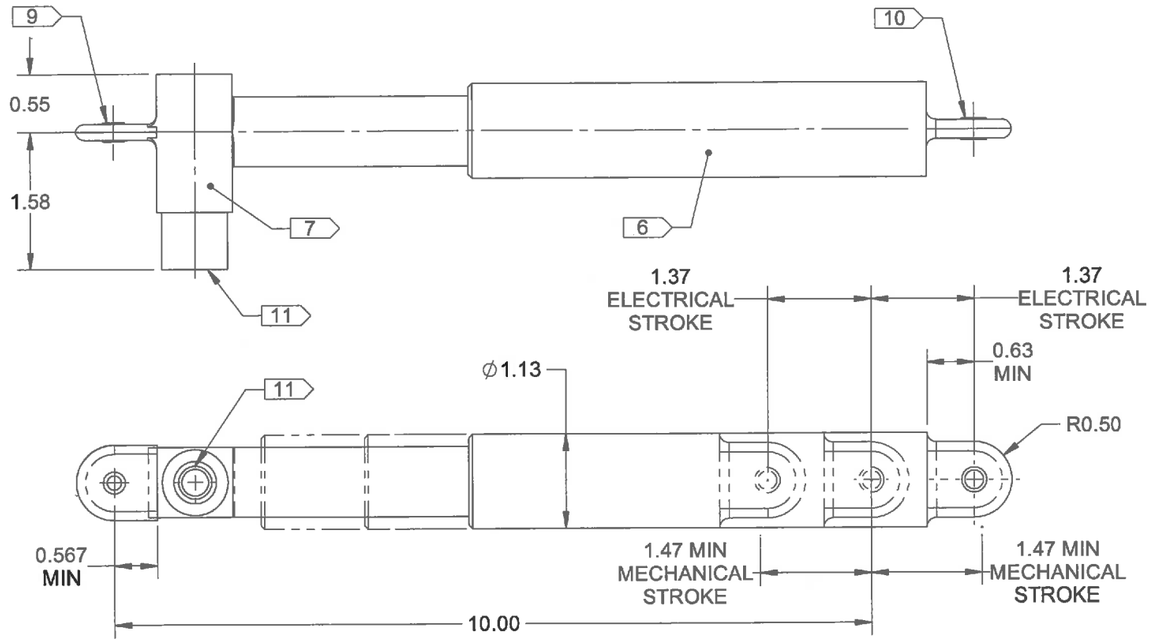
SPECIFICATION CONTROL DRAWING





EAGLE PART NUMBER	DESCRIPTION	VENDOR	VENDOR PART NUMBER	WEIGHT
E4286-1	LINEAR VARIABLE DISPLACEMENT TRANSDUCER	KAVLICO	GM12881	1.5 LBS

E4286-X LVDT

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) PERMANENTLY MARK IDENTIFICATION ON HOUSING:
   EAGLE COPTERS LTD.
   E4286-1
   S/N _____
7) PERMANENTLY MARK S/N ON INDICATED AREA
8) WEIGHT: SEE TABLE
9) BEARING TO CONFORM TO MS27645-3A
10) BEARING TO CONFORM TO MS27645-4A
11) CONNECTOR PER D38999/25YB35PN, ORIENTATION OF MASTER KEY WITHIN 20° OF VERTICAL

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE		12.12.03

DESIGN	
DRAWN	
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	12.12.03

EAGLE COPTERS LTD
CALGARY, ALBERTA, CANADA

DRAWING NO. E4286 REV. A
SHEET 1 OF 2
TITLE LVDT
SCALE NTS

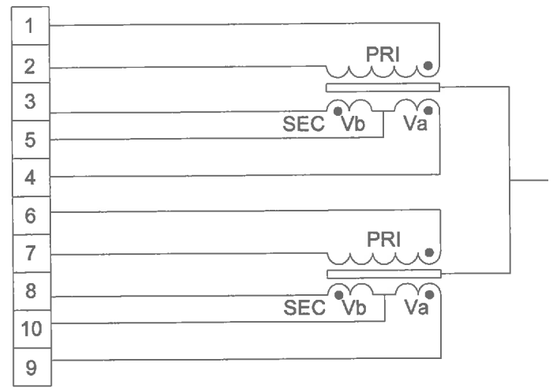
REQUIREMENTS	
GENERAL	
STROKE:	
ELECTRICAL	±1.37 INCHES
MECHANICAL	±1.47 INCHES MIN
SENSOR	LVDT
WEIGHT	1.5 LBS MAX
ELECTRICAL	
EXCITATION:	
VOLTAGE	4.80 VRMS ±5%
FREQUENCY	3906 ±40 Hz
WAVE FORM	SINE
INPUT IMPEDANCE	170 OHMS MIN
OUTPUT IMPEDANCE	400 OHMS MAX./SEC. HALF
LOADS	[EACH SEC. HALF] [ENTIRE SEC.]
RESISTANCE	60K ±1K OHMS NONE
CAPACITIVE	2000 pF ±5% NONE
DIELECTRIC STRENGTH	500 VRMS, 60 Hz
INSULATION RESISTANCE	100 MEG OHMS MIN. @ 500 VDC
PHASING	WITH THE PINS 2 (7) AND 5 (10) COMMON 3 (8) AND 4 (9) SHALL BE INPHASE WITH 1 (6) AND THE VOLTAGE FROM 5 (10) TO 4 (9), Va SHALL INCREASE WHEN THE ARMATURES ARE EXTENDED.
PERFORMANCE	
ZERO OFFSET [1]	0.0000 V/V
SENSITIVITY [2]	0.3800 V/V/IN
ACCURACY [3]	±1.0% F.S. MAX [4]
SECONDARY SUMMATION	0.6667 V/V ±10%
CROSSTALK	0.0025 V/V MAX.
TRACKING	1.0% F.S. MAX.
NULL DIFFERENCE	0.020 IN. MAX
ENVIRONMENT	
TEMPERATURE RANGE	
OPERATIONAL	-67° TO +158°F
NON-OPERATIONAL	-67° TO +185°F
PRESSURE	BAROMETRIC
HUMIDITY, FUNGUS, SAND AND DUST, SALT, FOG, ETC.	PER MIL-STD-810

[1] ZERO OFFSET IS DEFINED AS THE NOMINAL OUTUP AT THE ZERO STROKE POSITION WHEN THE OUTPUT IS TAKEN AS THE TOTAL VOLTAGE RATIO OF (Va-Vb)/(Va+Vb).

[2] SENSITIVITY IS DEFINED AS THE SLOPE OF THE BEST FIT STRAIGHT LINE WHEN THE OUTPUT IS TAKEN PER NOTE [1]

[3] ACCURACY IS DEFINED AS THE MAXIMUM ALLOWED DEVIATION OF ANY DATA POINT FROM THE NOMINAL OUTPUT WHEN THE OUTPUT IS TAKEN PER NOTE [1] AND INCLUDES EFFECTS OF LINEARITY, SENSITIVITY AND OPERATIONAL TEMPERATURE.

[4] FULL SCALE (F.S.) IS DEFINED AS THE ALGEBRAIC DIFFERENCE BETWEEN THE LIMITS OF THE ELECTRICAL STROKE AND THE FULL SCALE OUTPUT, THE ALGEBRAIC DIFFERENCE BETWEEN THE NOMINAL OUTPUTS AT THE ENDS OF THE ELECTRICAL STROKE. (F.S.=1.0412 V/V).



SCHEMATIC

DESIGN		EAGLE COPTERS LTD
DRAWN		CALGARY, ALBERTA, CANADA
CHECKED	KB	DRAWING NO. E4286 REV. A
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE LVDT SCALE NTS
DE APPR.		
DATE 12.12.03		